THE MYTH OF THE RESIDUAL OWNER: AN EMPIRICAL STUDY

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The law of corporate reorganizations should focus on identifying the residual owner, limiting agency problems in representing the residual owner, and making sure that the residual owner has control over the negotiations that the firm must make while it is restructuring.

—Douglas G. Baird and Thomas H. Jackson (1988).[1]

For nearly two decades, scholars have sought to improve on the existing method for governing large, public companies during bankruptcy reorganization. In its essence, the existing method is to impose on the incumbent managers fiduciary duties to all parties in interest and leave those managers in otherwise unfettered control.[2]

Proposals for change have come principally from Law and Economics scholars who seek to motivate managers through economic incentives rather than legal duties.[3] At the urging of Professors Baird and Jackson,

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1. Douglas G. Baird & Thomas H. Jackson, *Bargaining After the Fall and the Contours of the Absolute Priority Rule*, 55 U. CHI. L. REV. 738, 775 (1988).

2. Martin J. Bienenstock, *Between Management and the Debtor In Possession's Fiduciary Duties*, 61 U. CIN. L. REV. 543, 567 (1992) (describing the existing method of governing the bankrupt firm and noting that "a fiduciary's role is to act in someone else's best interest").

3. *E.g.*, Barry E. Adler, *Finance's Theoretical Divide and the Proper Role of Insolvency Rules*,

the focus has been on identifying the residual owners—persons whose interests are identical with those of the firm as a whole—and putting those persons in control of the firm. This sixteen year effort has been unsuccessful because most firms have no single class of residual owners. The Law and Economics scholars' search is for persons who do not exist.

To illustrate the theoretical allure of the residual owner approach, assume a firm with $100 million in assets that owes $30 million to secured creditors and $200 million to unsecured creditors. If the bankruptcy system followed the residual owner approach, it would put representatives of the unsecured creditors in control of the reorganizing firm. The secured creditors have no real interest in this reorganization because they will be paid in full in any event. The shareholders have no real interest in this reorganization because they will not be paid at all. The unsecured creditors own the "residual"—that is, whatever is left after the secured creditors have been paid in full. All of the gains and losses from actions taken during the reorganization will fall to them. They are the residual owners and so, according to the theory, the parties with the right incentives to govern during reorganization.

This example assumed the firm's value was known and the residual owner's identity obvious. Suspend either of those assumptions and the residual owner theory of corporate governance collapses. If claimants at two or more priority levels share residual owner status, their interests conflict and the theorist must propose some device for sharing control between them.

Most bankruptcy scholars who have considered the residual owner approach have come away with a healthy skepticism.[4] But despite its theoretical difficulties, the residual owner approach persists. I attribute this persistence to an empirical assumption that usually remains implicit. In spite of the theoretical difficulties in identifying the single residual owners of bankrupt firms, the scholars who employ residual owner approaches believe that in reality, residual owners exist[5] and can be easily identified in

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67 S. CAL. L. REV. 1107, 1112 (1994) (proposing to abolish reorganization proceedings so that investors can give managers securities that align the interests of managers with those of the firm); David Arthur Skeel, Jr., *The Nature and Effect of Corporate Voting in Chapter 11 Reorganization Cases*, 78 VA. L. REV. 461 (1992) (proposing to put unsecured creditors in control on the theory they are usually the residual owners).

4. *See infra* notes 10–18 and accompanying text.

5. For example, Skeel recognizes the difficulty in attempting to identify the residual class, but nevertheless assumes throughout his discussion that a single such class exists. *See* Skeel, *supra* note 3, at 480 ("The residual class is the first class that will be impaired if the plan proponent seeks to compensate as many classes in full as the firm's assets will allow.").

most cases.[6] Parties may bluster about the uncertainty of firm value and other parties may be compelled to compromise with them in order to avoid an expensive, burdensome valuation process. But at bottom, those scholars assume that the parties all know who is in the money, who is out of it, and who—the residual owner—is in between.

This Article reports the results of an empirical study designed to test that implicit assumption. The study concludes that no identifiable, single residual owner class exists in most reorganizing large public companies. Even by the end of the case, the parties have not been able to identify such a class. Part I describes the theoretical debate over the existence and utility of single residual owner classes in big bankruptcy cases. Part II presents the empirical study, beginning with a description of the universe of cases studied, the sources of the data, and the limitations of those sources. Subpart A reports and discusses the study's findings with respect to the numbers of investors having different levels of priority in the reorganizing firm. The typical reorganizing firm has about four investor priority levels that are subordinate to secured and bankruptcy priority creditors. The existence of so many investor priority levels makes it likely that investors at more than one level will share residual owner status. Subpart B reports and discusses the study's findings with respect to the numbers of residual owners actually identified by the reorganization process. The principal finding is that in 62% of the firms studied, the reorganization plan recognized that investors at more than one priority level shared residual owner status in a manner that left them with a substantial conflict with respect to investment policy. (That figure is a demonstrated minimum level of sharing; the actual level may be much higher.) Part III concludes that theories depending upon the existence of a single residual owner are unworkable. The problem is not merely that single residual owners are difficult to identify. The problem is that they rarely exist.

I. THE RESIDUAL OWNERSHIP DEBATE

The residual owner—typically defined as the investor who will reap the marginal dollar of the firm's gain or suffer the marginal dollar of its

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6. *E.g.*, Douglas G. Baird & Robert K. Rasmussen, *Chapter 11 at Twilight*, 56 STAN. L. REV. 673, 696 (2003) ("When we look at recent large, prenegotiated Chapter 11 cases, one commonly observes that the senior bondholders are in fact the residual owners for all practical purposes."); Skeel, *supra* note 3, at 501 n.150 ("[B]ecause firms' fortunes usually will not improve enough in chapter 11 to make full compensation of unsecured creditors a realistic possibility, unsecured creditors' decisionmaking incentives should not be skewed in any significant way . . . In short, the skewing effect seems likely to be more theoretical than real.").

losses[7]—is a frequently-invoked hero of economic theory. By that definition, the residual owner's incentives are precisely aligned with those of the firm. Imbued with the traits of omniscient, rational self-maximizer, the residual owner is in theory the perfect person to govern the firm.[8] In maximizing its own wealth, the residual owner will maximize the firm's wealth, and ultimately, social wealth.[9]

To implement this approach to corporate governance, however, requires some means for identifying the residual owner and putting that residual owner in control of the firm. The task has proven difficult, if not impossible. In thinking the matter through, bankruptcy scholars quickly recognized a problem with the definition of the residual owner. In the world of economic theory, both money and decisions are infinitely divisible, making it possible to talk about decisions that affect the marginal dollar of gains or losses.[10] In reality, decisions are lumpy. A decision—to build a plant or cancel a product line—does not affect just the marginal dollar of gains or losses. It affects an indivisible range of marginal dollars. If, for example, a firm is close to insolvency, the interests of both shareholders and creditors might be affected by the same decision. If so, both groups would qualify as residual owners with respect to the decision, and their interests would be in conflict. Shareholders would prefer the high-risk, high-return choice because they would share disproportionately in the gains. Creditors would prefer the low-risk, low-return choice, because they would suffer a disproportionate share of any

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7. *E.g.*, Dan Keating, *Good Intentions, Bad Economics: Retiree Insurance Benefits in Bankruptcy*, 43 VAND. L. REV. 161, 190 n.159 (1990) ("The 'residual' claimants in any Chapter 11 case will be those whose claims are at the margin—that is, those claimants who stand to win or lose depending on the fortunes of the firm."); George G. Triantis & Ronald J. Daniels, *The Role of Debt in Interactive Corporate Governance*, 83 CAL. L. REV. 1073, 1100 (1995) (referring to the "residual claimants, who gain or lose at the margin from the actions of the firm").

8. THOMAS H. JACKSON, THE LOGIC AND LIMITS OF BANKRUPTCY LAW 168 (1986). Jackson states:

> The only way that [a borrowing] decision can be made without bias is for it to be made by the group that will reap the benefits of a successful decision and pay the costs of an unsuccessful decision. That group consists of the residual claimants, who in the case of an insolvent company are almost always the unsecured creditors. It is they that should determine whether a loan is worthwhile and whether its terms are the best they can get.

Id.; *see also* Triatis & Daniels, *supra* note 7, at 1100 ("The neoclassical model of the firm proposes that, given an imperfect world, the optimal solution is to vest decision making authority with the residual claimants, who gain or lose at the margin from the actions of the firm.").

9. *E.g.*, Edward J. Janger, *Predicting When the Uniform Law Process Will Fail: Article 9, Capture, and the Race to the Bottom*, 83 IOWA L. REV. 569, 592 (1998) ("The logic is that any action that helps the residual claimant will increase the value of all claims against the enterprise.").

10. *E.g.*, Baird & Jackson, *supra* note 1, at 775 ("The dollar that is won or lost because of good or bad negotiating by definition is felt by the residual owner.").

losses. Neither group's interests would be congruent with those of the firm, so neither group's preference respecting the decision would be a useful guide. No single residual owner would exist, and the residual ownership approach to corporate governance would fail.[11]

Bankruptcy scholars were quick to recognize and acknowledge this and a host of other problems with the residual ownership approach.[12] For example, they noted that the system could cede control to the residual owner only if the system had some method for identifying the person or group in that position. To identify the residual owner presumably would require valuation of the firm.[13] That valuation would have to occur at the outset of the bankruptcy reorganization case.[14] Yet, valuation is notoriously expensive and difficult.[15] Indeed, valuation is the essence of the bankruptcy reorganization process. If the court could value the firm at the outset of the proceeding, the proceeding would no longer be

11. In arguing that the residual owner is a myth with respect to firms in financial distress, I do not mean to concede that they are any less a myth with respect to solvent firms. *See* Thomas A. Smith, *The Efficient Norm for Corporate Law: A Neotraditional Interpretation of Fiduciary Duty*, 98 MICH. L. REV. 214, 223–25 (1999) (arguing that sole residual owners do not exist in solvent firms).

12. *E.g.*, Douglas G. Baird, *Fraudulent Conveyances, Agency Costs, and Leveraged Buyouts*, 20 J. LEGAL STUD. 1, 10 (1991) ("Now the shareholders no longer have the right set of incentives because they are the residual owners of the firm over only a limited range [of values]."); Christopher W. Frost, *The Theory, Reality and Pragmatism of Corporate Governance in Bankruptcy Reorganizations*, 72 AM. BANKR. L.J. 103, 106 (1998) (noting the possibility that creditors and shareholders might both be residual owners at the same time); Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 669, 771–76 (1993) (refuting Baird and Jackson's concept of "collapsed" residual ownership).

13. *E.g.*, Frank H. Easterbrook, *Is Corporate Bankruptcy Efficient?*, 27 J. FIN. ECON. 411, 416 (1990) ("[H]ow does a judge identify the residual claimant when there are several layers of debt? To do this the judge must know the firm's value—yet the superiority of market over judicial processes in pricing the firm's assets is impetus for holding an auction. It is not particularly useful to have both a judicial and a market valuation process for the same corporation."); Thomas G. Kelch, *Shareholder Control Rights in Bankruptcy: Disassembling the Withering Mirage of Corporate Democracy*, 52 MD. L. REV. 264, 332 (1993) ("A difficulty . . . recognized by Professor Frost is that identifying the group with the residual claims can be problematic. To make this determination with a reasonable degree of certainty requires a valuation of the debtor's assets."); Scott F. Norberg, *Debtor Incentives, Agency Costs, and Voting Theory in Chapter 11*, 46 U. KAN. L. REV. 507, 544 (1998) ("The costs of transferring voting rights to residual owners immediately upon bankruptcy would probably outweigh the benefits, however. Identifying the residual owners at the early stages of a Chapter 11 case would require valuation of all firm assets, and valuation is typically time-consuming, expensive and less than reliable.").

14. Skeel, *supra* note 3 at 500 ("The residual ownership class could be identified if the Code were to provide for a valuation of the firm at or shortly after the filing of the chapter 11 petition.").

15. *Id.* ("But such a valuation would be costly and would consume both physical and temporal resources at a time when both typically are at a premium."); George G. Triantis, *A Theory of the Regulation of Debtor-in-Possession Financing*, 46 VAND. L. REV. 901, 915 (1993) ("[T]he identification of the residual owner in a multi-layered hierarchical capital structure depends on a costly and often ambiguous valuation of the firm.").

necessary.[16] The court could simply distribute claims and interests in the emerging firm on the basis of the absolute priority rule.[17]

Another problem was that the valuation necessary to identify the residual owner would apparently have to be made by the bankruptcy judge.[18] That might in large part defeat the purpose of the residual owner approach. The purpose was to shift control of the reorganization process from the bankruptcy judge to a market actor.[19] If the bankruptcy judges chose the market actors, the bankruptcy judges were at least arguably still in control.

Even if the theorist found some way to finesse the valuation problem at the outset of the case, the firm's value would continue to change during the proceeding. The identity of the residual owner might change with it.[20] To insure that control shifted to the investors at a different priority level when they became the residual owners, the valuation process might have to be continuous. Finally, scholars noted the practical difficulty of shifting

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16. Christopher W. Frost, *Running the Asylum: Governance Problems in Bankruptcy Reorganizations*, 34 ARIZ. L. REV. 89, 112 (1992) ("If one could readily assess amounts of assets and liabilities, the entire bankruptcy process would be extremely simple.").

17. Frost, *supra* note 12, at 115:

> The accurate use of this method requires an answer to the very question that bankruptcy resolves—the value of the business assets. If the value of the business assets were readily ascertainable, there would be no need for a judicially supervised reorganization process. New claims to the assets could be generated automatically by an application of the absolute priority rule. It is therefore the vagaries of business valuation that create the need for the reorganization process.

Id.

18. *But see* Adler, *supra* note 3, at 1121 (proposing that investors contract to require that managers hold "inalienable" interests that "would tend to align management's interests with holders of fixed obligations and would alleviate the need to have bankruptcy reorganization provide management" with such stakes).

19. *E.g.*, Douglas G. Baird & Robert K. Rasmussen, *The End of Bankruptcy*, 55 STAN. L. REV. 751, 785 (2002) ("As a comparative matter, the senior lender who will not be paid in full will more likely exercise control in a sensible fashion than will managers whose net worth depends on continuation or a bankruptcy judge whose training is usually not in business operations."); Norberg, *supra* note 13, at 546 ("The residual owners have better incentives than the bankruptcy judge, who has no financial stake in the firm, to make efficient deployment decisions."); Skeel, *supra* note 3, at 501 ("The analysis clearly suggests that it is preferable that a majority of the firm's unsecured creditors, rather than a court, approve any preconfirmation sale of substantial assets.").

20. *E.g.*, Norberg, *supra* note 13, at 544 ("Further, unless and until extinguished, even the equity interests in an insolvent firm have some value; there is always a chance that the firm's fortunes will take a turn for the better and yield value to the equity interests."); Skeel, *supra* note 3, at 500 ("Moreover, as the fortunes of a bankrupt firm rise or fall during the course of a chapter 11 case, the firm's residual owner could change. It is thus far from clear when or how the decisionmaking class should be chosen."); Triantis, *supra* note 15, at 916 ("[E]ven if the court can determine the firm's value, that figure will fluctuate during bankruptcy, particularly in the lengthy reorganizations of publicly held companies. Therefore, the loyalties of management under a residual owner rule may shift several times among different classes of creditors as the value of the firm fluctuates.").

control from one group to another as the necessity arose. As Professor George Triantis put it, "bankruptcy courts may find it difficult to mandate shifts in the loyalties of management who are accustomed to serving shareholder interests. Yet the alternative of replacing management loyal to a prior class of residual owners may cause disruptions in operations and loss of firm specific expertise."[21] As a basis for governing the reorganizing firm, the residual owner approach appeared deeply flawed.[22]

Professors Douglas Baird and Thomas Jackson initially brought the residual owner approach to bankruptcy governance. In 1988, they argued that "the law of corporate reorganizations should focus on identifying the residual owner, limiting agency problems in representing the residual owner, and making sure that the residual owner has control over the negotiations that the firm must make while it is restructuring."[23] Less than a year later, Jackson expressed doubts about the approach.[24] By the early 1990s, several writers had rejected it outright as unworkable.[25]

Others continued to adhere to the residual owner approach. Some sought to rehabilitate the approach,[26] some sought to apply it indirectly as a means by which judges would assess situations,[27] and some just

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21. Triantis, *supra* note 15, at 916.

22. Professor Norberg raised an additional problem. Because a residual owner governance scheme would often displace management upon the filing of the case, management would be reluctant to bring firms into bankruptcy reorganization. Norberg, *supra* note 13, at 545 ("Finally, even if the residual class could be identified without undue difficulty, a rule transferring voting authority to residual claimants upon the filing of a petition, like a rule requiring appointment of a trustee, would likely deter viable businesses from seeking Chapter 11 relief until it is too late.").

23. Baird & Jackson, *supra* note 1, at 775.

24. Thomas H. Jackson & Robert E. Scott, *On the Nature of Bankruptcy: An Essay on Bankruptcy Sharing and the Creditors' Bargain*, 75 VA. L. REV. 155, 159 (1989). ("The problem of transferring decisionmaking power from the equity owners . . . is compounded by the associated problem that no other class may sufficiently reflect the interests of the claimants taken as a whole. Thus, the objective of the collective is never entirely congruent with the objective of any of the constituent parts.").

25. *E.g.*, Kelch, *supra* note 13, at 332 ("We can never be certain that we have chosen the right group as the one with residual claims. To recognize this is to comprehend that we can never be assured that corporate control is vested in the economically correct party."); Triantis & Daniels, *supra* note 7, at 1100 ("Even at the best of times, it is difficult to establish a governance process that aligns managerial incentives with the collective interests of all stakeholders. No single investor or class of investors can represent the collective interest of all stakeholders of an insolvent firm.").

26. *E.g.*, Norberg, *supra* note 13, at 545–50 (proposing residual owner voting on plan confirmation); Skeel, *supra* note 3 (proposing to deem unsecured creditors as a group the residual owners in every case).

27. *E.g.*, Daniel B. Bogart, *Liability of Directors of Chapter 11 Debtors in Possession: "Don't Look Back—Something May Be Gaining On You,"* 68 AM. BANKR. L.J. 155, 248 n.494 (1994) ("A court faced with a plan that favors one class of creditors, or the shareholders, might follow Case's guidelines as to when to use one approach or the other—that is, determine the identities of the residual owners, evaluate the plan, and ask in this light whether the DIP is overreaching."); Frost, *supra* note 12, at 114 ("When evaluating a particular decision, bankruptcy judges should attempt to discover the

continued to invoke it without attempting to defend it.[28] Like Freddy Kruger,[29] the residual owner approach was mortally wounded in article after article, but would not die.

Scholars who continue to employ the concept of residual ownership in bankruptcy governance proposals seem generally to acknowledge that the concept cannot provide a neat solution.[30] But they continue to believe that residual ownership can work in some less precise or less direct manner, and thus keep corporate decision making in the hands of market actors and—perhaps more importantly—out of the hands of bankruptcy judges and fiduciaries.[31] Thus, Professors Baird and Jackson sought to solve the problem of multiple residual owners by collapsing all future possibilities to present value.[32] That ascribed a single value to the firm and, they argued, made it possible to identify a single residual owner in every case.[33] Baird and Jackson undoubtedly recognized that the incentives of the residual owner thus selected would not be identical to those of the firm, but felt the incentives would be close enough. Professor David Skeel proposed a similarly inelegant solution. He would have deemed the unsecured creditors as a group—including senior and subordinated

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views of the group that stands at the margin of solvency—the economic residual claimants."); *id.* at 115 ("Thus, while residual claim analysis cannot provide a clear rule of decision, it can be used to evaluate competing positions. Rather than simply ask whether a proposed business decision is correct, this approach asks the judge to take account of the incentives of those advocating or contesting the decision."); Marshall E. Tracht, *Insider Guaranties in Bankruptcy: A Framework for Analysis*, 54 U. MIAMI L. REV. 497, 508 (2000) ("Thus, the directors' fiduciary duties run to the creditors upon insolvency because they become the residual claimants, the parties who stand to gain or lose based on the decisions made by management.").

28. *E.g.*, Stuart C. Gilson & Michael R. Vetsuypens, *Creditor Control in Financially Distressed Firms: Empirical Evidence*, 72 WASH. U. L.Q. 1005, 1006 (1994) ("When a firm is clearly insolvent, and the face value of outstanding debt far exceeds the present discounted value of the assets, creditors, as the residual claimants, should have authority to decide how the firm's assets are allocated.").

29. For the historical record, Freddy Kruger is the resilient villain of the *Nightmare on Elm Street* series of horror films. *See The Nightmare on Elm Street* Saga, *at* http://www.geocities.com/Hollywood/Makeup/4303/nightmare.html (last visited Jan. 27, 2005).

30. Douglas G. Baird, *The Uneasy Case for Corporate Reorganizations*, 15 J. LEGAL STUD. 127, 138 (1986) ("One should not, however, exaggerate the difficulties inherent in deciding who among the investors should conduct the sale."); Frost, *supra* note 12, at 115 ("[The vagaries of business valuation] present[s] an insurmountable obstacle to the full realization of such a theoretically neat solution.").

31. *See supra* note 17 and accompanying text.

32. Baird & Jackson, *supra* note 1, at 761 ("The firm that is reorganizing is typically insolvent. In the case that we focus on throughout this paper, if all future possibilities were collapsed to present values, the senior creditor would be entitled to the entire firm. In this sense, the senior creditor is the residual owner of the firm."). *But see* LoPucki & Whitford, *supra* note 12, at 771–76 (refuting Baird and Jackson's concept of "collapsed" residual ownership).

33. Baird & Jackson, *supra* note 1, at 762 n.58 (analogizing their solution to the shift of fiduciary duties that occurs "upon insolvency").

creditors—to be the residual owners of every reorganizing corporation. Despite their differing priorities among themselves, all classes of creditors would have voted together on governance issues during reorganization.[34]

In an article published at the end of 2002, Professors Baird and Rasmussen presented a new, and more elegant version of the residual owner approach.[35] They argued that no regulation of bankruptcy governance is necessary because private contracting has already succeeded in resolving investors' conflicts of interest. They do not use the words "residual owner" or "residual claimant," but the concept is the same. Contracts among the investors in the firm, they claim, vest control in "the senior lender who will not be paid in full."[36] Those contracts shift the control rights from one such lender to another as the fortunes of the firm change.[37]

> Much of the law of corporate reorganizations (and indeed corporate law generally) is premised upon the idea that contracts set out control rights of the assets in a way that is fixed and rigid. Under this view, legal processes and rules are needed because exogenous events create a mismatch between incentives of the individual investors that possess control rights and what is in the best interests of the firm as a whole. As Barry Adler has pointed out, however, [contractual] control rights are typically defined dynamically. They change as the firm's fortunes change, typically in ways that ensure that such mismatches do not occur.[38]

Thus, Baird and Rasmussen propose, the invisible hand of the market solved the valuation problem the theorists could not. As a result, "the senior lender who will not be paid in full will more likely exercise control in a sensible fashion than will managers whose net worth depends on continuation or a bankruptcy judge whose training is not in business operations."[39] Freddy Kruger is back.

34. Skeel, *supra* note 3, at 501 ("Allowing every unsecured creditor to vote would mean that the true residual class of unsecured creditors, as well as nonresidual classes of unsecured creditors, would be free to participate in the vote. Notwithstanding its limitations, however, the benefits of a clear rule outweigh the costs of attempting to determine precisely the firm's residual owners.").

35. Baird & Rasmussen, *supra* note 19, at 753.

36. *Id.* at 785.

37. *Id.* at 778 ("Most large firms now allocate control rights among investors in a way that ensures coherent decisionmaking throughout the firm's lifecycle.").

38. *Id.* at 781–82 (internal footnotes omitted).

39. *Id.* at 785.

II. THE EMPIRICAL STUDY

The study includes all large, public companies emerging from reorganization in United States Bankruptcy Courts as public companies from January 1, 1991 through December 31, 1996. I identified these firms from the Bankruptcy Research Database (BRD). Under BRD protocols, firms are considered "public" if they filed an annual report with the Securities and Exchange Commission for a year ending less than three years prior to the bankruptcy filing and "large" if they reported assets in excess of approximately $220 million.[40] Ninety-eight firms met those requirements.

I obtained the data regarding priority levels and plan distributions from the plan summaries prepared by New Generation Research and published on LEXIS as part of the Bankruptcy Data Source database (BDS). The study relies upon the accuracy of those reports.

BDS often reported calculations of recoveries without specifying whether the calculations were made by plan proponents or BDS plan analysts. I accepted those calculations without further investigation. In many instances, BDS either did not calculate recoveries or did not calculate them in the form needed for cross-case comparisons. If the data were sufficient to support the necessary calculations, I made them.[41]

The BDS plan summaries described the distributions by classes, not priority levels. I converted classes to priority levels principally on the basis of the names of the financial instruments involved. That is, the

40. The protocols appear in greater detail on my Bankruptcy Research Database website. *See* Lynn M. LoPucki, *WebBRD: Lynn M. LoPucki's Bankruptcy Database*, *at* http://lopucki.law.ucla.edu/contents_of_the_webbrd.htm (last visited Jan. 27, 2005).

41. In making the calculations, I followed these protocols. I valued debt instruments at face value. I valued stocks on the basis of projected rather than actual values, because projected values better indicate whether the parties to the case believed they had identified a residual owner. Where projections were not available, I used stock prices and numbers of shares outstanding from the Center for Research in Securities Prices ("CRSP"). I used the first month of trading, except in a few cases in which it appeared atypical based on subsequent months. In no case did I use a trading value from later than the second month of trading.

For warrants, neither projections nor trading prices were available. In each case, where the value of the warrants could conceivably have affected outcomes, I examined the relationship between the warrants and the actual trading prices of the stocks over the warrant exercise periods. In only a handful of cases did the stocks ever trade as high as the warrant price. For these cases, I placed no value on the warrants, but indicted their existence with a "+" in the Appendices. In two cases, the warrants were clearly in the money from the outset, but in neither did any reasonable value placed on the warrants affect the classification of the case.

As a result of the reliance on the Bankruptcy Data Source ("BDS") calculations and these protocols, the valuations from this study are only approximations. The approximations are adequate, nevertheless, because in very few cases did case classifications depend on subtle differences in valuation.

summaries described particular classes as composed of "senior notes," "12% senior subordinated debentures," "all other unsecured claims," or "Class A preferred stock." I developed a set of protocols for determining priority level from those labels.[42]

The universe of cases studied includes only reorganizations. The 33 cases ending in liquidation during that period were excluded. Ten of the 33 cases produced no plan; the cases ended in conversion to Chapter 7. Plans existed in most of the remaining 23 cases, but summaries were not readily available. The bias this introduced is discussed in Part III.C.

A. The Numbers of Investor Priority Levels in Bankrupt Firms

1. Study Design

The residual owner theory depends on at least a rough congruence between the incentives of the residual owner and the interest of the firm. Theoretically, that congruence could exist not just for a single person as residual owner, but also for a group of people whose interests were essentially the same. Each member of such a group would have the same incentives. They could be expected to act in the same manner, so it would not matter which of them controlled the firm.

To illustrate, all shares of stock in a single class have the same rights. Absent other influences, all owners of stock of that class would have the same incentives with respect to the investment policies of the firm. If those incentives were congruent with the interests of the firm, it might not matter which of the shareholders were in control. Thus the single residual owner necessary to make the theory work would not have to be a single person. It could be a group of persons who each have the same interest.

In reality, such an alignment of interests within a class of investors would be the exception. Investors differ in personal characteristics that affect preferences, such as risk aversion or wealth, and many have interests—other than the particular class of investment they hold—that

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42. Even if they received materially different distributions, all unsecured creditor classes were assumed to be general unsecureds unless words suggesting different priority were used. The following words suggest differing priority: "subordinated," "senior," "junior," "debenture," and "bonds." A class labeled "subordinated" was assumed to have different priority from a class labeled "senior subordinated." A class labeled "senior unsecured" was assumed to have different priority from a class labeled "unsecured," but only if both were paid in full or the class of unsecureds received a materially different distribution than the senior unsecureds. Priority levels holding less than $1 million in claims were not considered separate, even if their distributions differed materially. Classes of preferred stock were assumed to have identical priority unless they received substantially different distributions. Classes of common stock were all coded as a single level of priority.

would affect how they might govern. An unsecured creditor might also be a supplier to the firm. A shareholder might also be an employee. A bondholder might own stock. These differences constitute a substantial hurdle for proponents of residual owner theories, but they are not the subject of this study. This study proceeds on the assumption that all investors at the same priority level have the same interests.[43]

Creditor and shareholder groups often agree among themselves that some will have priority over others. Priority, as the concept is commonly employed, means that if the funds available for payment are insufficient to satisfy both obligations, the funds will be applied to the obligation having priority until it is paid in full. Only the excess, if any, will be applied to the subordinate obligation.

With respect to the firm's investment policy, the interests of investors with a given level of priority (hereafter referred to as an "investor priority level") differ from the interests of investors at other priority levels. High priority level investors tend to prefer conservative policies; low priority level investors tend to prefer risk taking.[44] This part of the study sought to determine the number of investor priority levels existing within each of the firms, ignoring secured and bankruptcy priority claims.

An investor priority level should not be confused with a "class" of creditors, as that concept is employed in bankruptcy reorganization. Reorganization plans divide creditors and shareholders into classes. Creditors and shareholders are placed in a class because all have at least roughly similar rights under nonbankruptcy law. Members of a class receive the same treatment under the plan, except as agreed by each individual investor in the class.[45] Investors at a single priority level may be placed in several different classes, with the result that there are often many more classes than priority levels. This study examines only the variation in distribution between priority levels, not the variation in distribution among classes from a single priority level.

To illustrate the difference, plans often classify the deficiency claims of secured creditors separately from the claims of general unsecured creditors and treat the two differently, even though both groups are of the same priority level. Similarly, most of the plans studied classified unsecured

43. That they do not is reflected in varying recoveries to classes at the same priority level. The variations are apparent in Appendices B and C, *infra* at 1373–74.

44. *See, e.g.*, LoPucki & Whitford, *supra* note 12 at 672 (reporting that such conflicts actually arose in the Continental Airlines and Manville bankruptcies).

45. 11 U.S.C. § 1123(a)(4) (2000) ("[A] plan shall . . . provide the same treatment for each claim or interest of a particular class, unless the holder of a particular claim or interest agrees to a less favorable treatment of such particular claim or interest.").

claims of less than a certain dollar amount in a separate "convenience" class and treated them differently. Despite these classifications and treatments, deficiency claims, general unsecured claims, and small unsecured claims are all of the same priority level. For various reasons, some of these claims received better treatment than others under the plans, but all entered the proceedings with the same legal rights—those of unsecured creditors.

Because distributions to convenience and deficiency classes are often a function of factors other than priority level, those classes were excluded from the study.[46] If classes of general unsecured creditors were treated differently without explanation, the distributions to each were included in the data.[47] If any substantial class at a priority level qualified as a residual owner, the priority level was considered to be a residual owner. Plan proponents estimated distributions to some classes as falling within a range of percentages, rather than as a single percentage. In those cases, the ranges were included in the data.[48] Ultimately, the estimation by ranges of percentages rather than single percentages made no difference in the classification of any investor priority level for purposes of this study.[49]

Creditors can contract for priority in specific assets. These priorities are nearly always in the form of security interests. Upon the filing of a bankruptcy case, secured creditors are entitled to "adequate protection" of their rights in the value of their collateral.[50] With respect to the actually-secured portions of their claims, secured creditors are not supposed to be substantially at risk of the firm's investment policy. Accordingly, they should rarely be the firm's residual owners. For this reason, and also because data on secured creditors are virtually always inadequate for cross-case comparisons, the secured level of priority is not included in this study.

This study also ignores unsecured creditors entitled to priority under the bankruptcy code. They too must be paid in full for the reorganization to go forward over their objection.[51] Rarely could they be the residual owners of the reorganizing firm. First, their claims are usually small in

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46. The convenience classes in the cases studied were sufficiently small in total amount that they were inconsequential.

47. *See* Appendices B and C, *infra* at 1373–74 (listing multiple recoveries at some priority levels).

48. *Id.*

49. In no case was a range broad enough to affect the classification of a case.

50. 11 U.S.C. §§ 361, 362(d)(1).

51. 11 U.S.C. § 1129(a)(9) (requiring, as a condition of confirmation, that the plan provide for full payment to all bankruptcy priority claims).

relation to those of the unsecured, non-priority classes. Second, in most cases they are senior to unsecured classes that are being paid in full or nearly in full.

Six types of priority levels remain: (1) common shareholders, (2) preferred shareholders, (3) junior subordinated creditors, (4) senior subordinated creditors, (5) unsecured creditors, and (6) senior creditors. Creditors are "senior" if they have contracted to receive the pro rata distribution owing to another, subordinated class. Thus, even though senior creditors do not have priority over unsecured creditors, they may receive full payment in a case where unsecured creditors do not.

Almost invariably, reorganizing large public companies are corporate groups rather than single entities.[52] A corporate group consists of a parent corporation and one or more subsidiaries. Entities, not groups, file bankruptcy cases. But once members of a group have filed, the bankruptcy court consolidates the cases administratively. The effect of this "administrative consolidation" is that the court administers the cases in most respects as if they were a single case. The entities in the group are likely to have a single management and be represented by a single set of professionals. Thus they are likely to adopt a single investment policy.

Unless the court also consolidates the estates of the group members substantively, creditors and shareholders continue to have claims against the specific entities with which they originally dealt. If expected recoveries differ across entities, so do creditor and shareholder incentives. To illustrate, the unsecured creditors of entity A, which is expected to pay 95 cents on the dollar to unsecured creditors, would have little to gain from risk-taking and much to lose. The unsecured creditors of Entity B, which is expected to pay 5 cents on the dollar, would have much to gain from risk taking and little to lose. Both these creditor groups are general unsecured creditors. But because they are creditors of different entities in the group, the two group's interests are in conflict with each other and with the interests of the corporate group as a whole. Neither creditor group can be the sole residual claimant with respect to the relevant governance unit, which is the corporate group as a whole.

Because each entity in a group has its own financial structure, each potentially has its own residual owner or owners. Consider, for example, an insolvent parent corporation that owns all of the stock of two subsidiaries. Subsidiary A is solvent, Subsidiary B is not. Each of the three

52. The BRD records the numbers of entities comprising the corporate groups for 310 bankruptcy cases filed from 1980 to 2000. The number of "groups" composed of only a single entity is 6 (2%). *See* LoPucki, *supra* note 40.

corporations has a single class of unsecured debt.

On these facts, the unsecured creditors of Subsidiary B are the residual owners of Subsidiary B. The unsecured creditors of the parent corporation are the residual owners of the parent corporation and Subsidiary A. That is, any increase in the value of Subsidiary A will accrue to the benefit of the parent corporation as the sole shareholder of Subsidiary A. That increase in the value of the parent corporation will accrue to the unsecured creditors of the parent corporation, as residual owners of the parent corporation. The investors in this corporate group are at four levels of priority: three levels of unsecured creditors and the shareholders of the parent corporation.

Among the firms studied, the average number of entities in the corporate group was 26 and the median number 17. Potentially, that created a huge number of different investor priority levels. That huge potential did not manifest in the reorganization plans. Only 14 of the 84 plans analyzed (17%) provided for distributions that differed by entity. In most of the 14, only two entities were mentioned. The plan summaries did not indicate whether the numbers were small because few entities in a group incurred debt or because plan drafters consolidated the estates by provisions of the plan.

The method employed in this study recognizes investor priority levels resulting from the existence of multiple entities only if investors at those levels received different distributions. To illustrate, if a plan provided for distributions to unsecured creditors of the parent based on the financial condition of the parent and to unsecured creditors of a subsidiary based on the financial condition of the subsidiary, I recorded two unsecured creditor priority levels. If, however, a plan provided the same distribution for unsecured creditors of the parent and the subsidiary, I recorded one unsecured creditor priority level, even if the plan classified the creditors separately. Classes of intra-company claims and interests—that is, claims or stock held by other members of the corporate group—were not counted as investor priority levels.

The purpose of this part of the study was to determine the number of investor priority levels existing in the financial structure of the reorganizing firms. Each level represents an actual group of investors whose interests could potentially have conflicted with investors at all other levels. Whether that potential conflict became an actual conflict depended, for each firm, on the range of possible firm values at the time of bankruptcy and the contractual relationship among the investors at different priority levels.

Of the 98 reorganizing firms in the targeted universe, the data were sufficient to support analysis of 84 (86%). The insufficiencies derived from two sources. BDS did not summarize a few of the plans. In others, the summary information was insufficient to show the investors' priority levels.

2. Findings

Appendix A shows the numbers of priority levels existing in each of the 84 reorganizing firms for which data were available. Column (2) shows that the numbers of investor priority levels ranged from a high of 13 to a low of two. Every firm had common shareholders (column (8)) and at least one class of general unsecured creditors (column (4)). The large majority of firms (79%) had at least one class of contractually-subordinated debt designated as "senior subordinated" (column (5)). Most also had either a class of junior subordinated debt (column (6)) or preferred stock (column (7)). Only 18 (21%) had a class of unsecured senior debt (column (3)). Firms that had a subordinated class of unsecured creditors but not a senior class of unsecured creditors probably had a senior class of secured creditors. Because the senior class was secured, that class does not appear in the data.

Only 14 firms (17%) had separate priority levels resulting from the recognition of separate entities.[53] But nine of the 19 firms with six or more priority levels (47%) had separate priority levels resulting from the recognition of separate entities. If a firm incurs debt through multiple subsidiaries, the number of investor priority levels can multiply rapidly.

The average number of priority levels was 4.3, the median 4. To the extent that any structure can be described accurately as "typical" it would be a firm with four or five priority levels subordinate to bankruptcy priority creditors. That firm would have common shareholders, unsecured creditors, senior subordinated debt, and either junior subordinated debt or preferred stock. The typical firm would not have senior unsecured debt or investor priority levels resulting from the recognition of separate entities.

The paradigm financial structure in the legal literature is a firm with common stock, unsecured debt, and secured debt[54]—a combination that would be characterized as having two investor priority levels for the purpose of this study. Perhaps the most striking finding from this part of the study is that only 7 of the 84 firms studied (8%) fit the paradigm.

53. These firms are indicated by an asterisk in Appendix C, column (8).

54. *See, e.g.*, JACKSON, *supra* note 8, at 32. ("Under much modern corporate law it is most useful to view shareholders, unsecured creditors, and secured creditors as the owners of the firm.").

3. *Discussion*

The findings with respect to the number of investor priority levels show that theorists who seek to identify and empower the residual owner are working on difficult terrain. Firms have multiple investor priority levels in their financial structures. When the value of the firm is uncertain, the likelihood that the range of possible values will stretch across priority levels is great. When it does, no single residual owner can be identified because none exists.

The cases analyzed in this study were drawn from an era in which junk bond financing was common. Had the universe been drawn from a different era, the numbers of priority levels may have been lower—or higher.

That does not matter, however, to the problem at hand. Bankruptcy theorists are not in the business of designing regimes that will work in some eras but not in others. Changes in bankruptcy law and contracting take years to work through the system. A solution inadequate to firms emerging from 1991 to 1996 should not be adopted even if the current crop of bankrupt firms have simpler financial structures.

B. *The Residual Owners of Bankrupt Firms*

The analysis reported in the preceding section addresses the *potential* for investors at two or more priority levels to share the status of residual owners. This section reports on the frequency with which that *actually* occurred.

1. *Study Design*

The study design rests on two assumptions. The first is that when investors at two or more priority levels each have recoveries that are substantial but not substantially full, they share in the marginal dollar of gains or losses. They are co-residual owners with conflicting interests. For this purpose, a recovery is "substantial but not substantially full" if it represents at least ten cents and not more than 90 cents on the dollar to each of the two major classes involved. To put it another way, the study design assumes that recoveries of up to about 10% can result from nuisance value or errors in measurement, and so not indicate a substantial sharing in the marginal dollar of gains or losses. My earlier work with Professor William Whitford supports the use of 10% as a cutoff.[55]

To illustrate this first assumption, if the plan proposes to pay 88 cents on the dollar to a senior class of creditors and 12 cents on the dollar to a junior class, I assumed that both classes were residual owners. That is, if the firm had earned more than it did between the filing of the bankruptcy case and the fixing of recoveries under the plan, both classes would have shared in the additional earnings—for the same reasons they shared in the actual earnings. If, instead, the plan had proposed to pay 88 cents to the senior class and 2 cents to the junior class, I did not assume that the junior class was a residual owner. The senior class might not have believed that the junior class was entitled to anything at all, but nevertheless agreed to payment of the nuisance value of its claim. Had the firm earned more than it did, the nuisance value—which is a function of the amount of trouble the junior class could have caused the senior class, not the amount the junior class could have won for itself—might not have changed. If not, the junior class would not have shared in the marginal dollar of gain (or loss) and so should not be considered a residual owner.

Sharing in the marginal dollar of gains and losses is not always the result of uncertainty regarding firm value or a deviation from absolute priority. The pattern can flow from strict enforcement of rights under subordination agreements when firm value is known.

To illustrate, assume a firm with 132 in assets, and three classes of unsecured creditors, each owed 100. Absent agreement, each class would be entitled to a recovery of 44, which is 44 cents on the dollar.[56] But if the Junior class entered into a typical subordination agreement, it contracted to surrender its recovery to the Senior class until the Senior class has been paid in full. In this example, the Junior class would surrender its entire recovery—44—to the Senior class. The result would be a distribution of 88 to the Senior class, 44 to the General Unsecured class, and nothing to the Junior class.

In this illustration, a precise firm value was assumed, and no deviation from absolute priority has occurred. Nevertheless, the Senior and General

55. In a study of deviations from absolute priority in favor of equity in 43 cases filed in the early and mid-1980s, we found on the basis of interview answers that the plan negotiators were confident of insolvency in 30. The deviation from absolute priority in favor of equity exceeded 8.1% in only 2 of the 30 cases (7%). Lynn M. LoPucki & William C. Whitford, *Bargaining Over Equity's Share in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 139 U. PA. L. REV. 125, 142–44 (1990) (showing the pattern of deviations and describing the interviews regarding the beliefs of the negotiators). Equity recoveries were substantial in 11 of 12 cases of solvent debtors. *Id.* at 166.

56. 132/(100 + 100 + 100) = .44.

Unsecured classes share in the marginal dollar of gains. If assets in the above example increase by one, two-thirds of that one will go to the senior class and the remaining one-third will go to the General Unsecured class. Because both classes share in the marginal dollar of gains, both qualify as residual owners. They have conflicting interests with respect to the firm's investment policy. With an expected recovery of 88 cents on the dollar, the Senior class has relatively little to gain from risk taking. With an expected recovery of only 44 cents on the dollar, the General Unsecured class has much to gain from it.[57]

The second assumption of the study design is that firm value is sufficiently volatile that an award of near full recovery to one priority level combined with only a nominal recovery to the next lower level demonstrates that creditors at neither level could be confident of their recovery at earlier stages of the bankruptcy case. Each would have had an interest in controlling the firm's investment policy for their own benefit during the case, so that both should be considered residual owners. For this purpose, a "near full recovery" is one that exceeds 90 cents on the dollar and a nominal recovery is one less than 10 cents on the dollar. This second assumption identified only two of the 48 multiple-residual owner cases (4%), making it of relatively minor importance.[58]

These assumptions may not be accurate with respect to borderline cases. But direct examination of the data in the Appendices will show that the results are robust. The findings are not driven by close cases.

2. *Findings*

Data were sufficient for analysis in 78 of the 98 target cases (80%). In 48 of the 78 cases (62%), investors from more than one priority level qualified as residual owners under one of the two tests described in the preceding section. Table 1 shows the number of reorganizing firms with various numbers of residual owners.

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57. The pattern of sharing in subordination cases is actually more complex than this example would suggest. The legal effect of the subordination agreements in common use today is uncertain. Both contests and compromises are common. *E.g.*, *In re* Envirodyne Industries, Inc., 29 F.3d 301 (7th Cir. 1994) (contest over the meaning of a commonly used subordination agreement); LoPucki & Whitford, *supra* note 55, at 160 n.76 (empirical study noting several challenges to subordination agreements).

58. The cases were Gilbert/Robinson and WTD Industries.

Table 1. Firms With Multiple Residual Owners,
By Number of Investor Priority Levels Involved

Number of investor priority levels sharing residual owner status	Number of firms	Percent of firms
1	30	38%
2	28	36%
3	11	14%
4	5	6%
5	2	3%
Over 5	2	3%
Total	78	100%

Appendix C provides more detail with respect to distributions by the 48 reorganizing firms having more than one residual owner.

Table 2 summarizes the data regarding firms with only a single residual owner. The table shows that if a firm has only a single residual owner, that owner is most likely to be the senior subordinated class. The next most common single residual owners were unsecured creditors and common stockholders.

Table 2. Residual Owners
Firms Having Only One Residual Owner

Priority level of residual owners	Number of firms	Percent of all firms	Percent of single residual owner firms
Unsecured creditors	9	12%	30%
Senior subordinated	10	13%	33%
Junior subordinated	1	1%	3%
Preferred stock	1	1%	3%
Common stock	9	12%	30%
All firms with single residual owner	30	39% (due to rounding)	99% (due to rounding)

Appendix B provides greater detail regarding the distributions by reorganizing firms having only a single residual owner class.

3. Discussion

In at least 62% of large public company reorganizations, no identifiable single residual owner exists. Instead, two or more groups with conflicting interests with respect to the firm's investment policy share the marginal dollar of gain or loss. The effect is to render unworkable virtually any bankruptcy governance scheme that depends on identification of the residual owner.

In two important respects, the methods employed in this study tend to understate the difficulty in identifying single, residual owners. First, the study determined the numbers of residual owners by examining the distributions under confirmed plans. The terms of confirmed plans are often fixed only late in the bankruptcy process, after the parties have had a full opportunity to develop and test their analyses and understandings, and usually after the negotiators have seen some reports of post filing operations. By contrast, a comprehensive bankruptcy governance scheme must go into effect at the beginning of the case. At that time, the task of identifying residual owners might be considerably more difficult.

Second, the study's methods provide a very conservative estimate of the number of investor priority levels whose interests conflict with those of the firm. By using outcome data to assess investor interests, the method implicitly assumed that the outcome of each of these cases—reorganization yielding a particular distribution—was inevitable. In fact, the outcomes probably were not. Consider, for example, the ten firms shown in Appendix B to have paid 100 cents on the dollar to all their creditors. Because the creditors recovered the full amounts owing them, the creditors are not classified as residual owners. But the creditors in each of these ten bankruptcy cases were probably significantly at risk. Had those risks resolved differently, they would have lost money. Were it not for the possibilities those risks would have resolved differently, the firms would not have needed to file bankruptcy.

The study's methods treat these creditors as having had no conflict with shareholders as to the firm's investment policy, even though most probably did. The same is true for other investor priority levels considered non-residual in the cases listed in Appendix B. As a result, this study's finding of single residual owners in 38% of reorganizing firms probably overestimates substantially.

The findings from this Part have implications for several proposed schemes of bankruptcy governance. Professor Norberg, for example, rested his proposal on the assumption that although a single class of residual owners could not be identified at the beginning of reorganization cases, such a class could be identified by the end.[59] The data indicate that this is true for only a minority of cases.

Professors Baird and Jackson proposed to identify residual owners by collapsing the possibilities as to future firm values to establish a single value for the firm.[60] The data from this study show that proposal, even if implemented perfectly, would place control of the firm in the hands of a group with interests significantly different from those of the firm as a whole in more than 62% of cases.

Professor Skeel proposed that all unsecured creditors, regardless of priority level, should vote on governance issues as a single class.[61] The data from this study suggest that, under Skeel's proposal, the creditors voting in 9 of the 78 cases (12%) may have had no residual owners among them, because shareholders were the sole residual owners. The creditors voting in an additional 56 cases (72%) would have substantial priority conflicts among them.[62]

Finally, Baird and Rasmussen argued that contracting parties solve the bankruptcy governance problem by dynamically allocating "control rights"[63] to a succession of "single investor[s]"[64] so there is no "mismatch between incentives of the individual investors that possess control rights and what is in the best interests of the firm as a whole."[65] The data from this study cast doubt on that possibility. No single investor group with incentives matching those of the firm existed in the large majority of the cases studied.

Baird and Rasmussen characterize banks and financial institutions, acting in the capacity of prepetition secured lenders or debtor-in-possession lenders ("DIP lenders"), as the residual owners and controllers of reorganizing firms.[66] Secured and DIP lenders were not directly the

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59. Norberg, *supra* note 13, at 543–50.

60. Baird & Jackson, *supra* note 1, at 761 ("The first that is reorganizing is typically insolvent. In the case that we focus on . . . , if all future possibilities were collapsed to present values, the senior creditor would be entitled to the entire firm. In this sense, the senior creditor would be entitled to the entire firm. In this sense, the senior creditor is the residual owner of the firm.").

61. *See supra* note 32.

62. Appendices B and C, *infra* at 1373–74. This figure is derived by counting the cases in which creditors at two or more priority levels recovered different percentages of their claims, including priority levels that were paid in full or received no distribution.

63. Baird & Rasmussen, *supra* note 6, at 782 ("[C]ontrol rights are typically defined dynamically.").

64. *Id.* at 785 ("To be sure, a firm might find itself caught up in a sudden crisis, and no single investor may be able to take control. But these cases are increasingly rare.").

65. *Id.* at 781.

66. *E.g.*, Douglas G. Baird & Robert K. Rasmussen, *Four (or Five) Easy Lessons From Enron*, 55 VAND. L. REV. 1787, 1807 (2002) ("In the case of a large firm in bankruptcy, we find that, at the

subject of this study. But in the large majority of the cases studied, secured and/or DIP lenders had rights senior to the priority levels studied. The DIP lenders had priority over unsecured creditors and so were protected by substantial cushions of equity in nearly every case.[67] The secured lenders were entitled to adequate protection and so, with respect to the secured portions of their claims, should not have been at risk at all. Thus, the control exercised by DIP lenders is rarely control by a residual owner.[68]

Secured lenders sometimes had unsecured deficiency claims. But in most of the cases studied, such deficiency claims would have been paid in full.[69] It is a reasonable assumption that secured bank lenders fared no worse on their deficiency claims than the best recovery listed in Appendix B or C for each case. Those best recoveries were substantial in the large majority of cases. The data from this study suggest that the interests of banks and financial institutions probably were not at substantial risk in the cases studied.

The financial structures of reorganizing firms fluctuate over time. Less of the firm's value belongs to unsecured creditors in today's reorganizations than in the reorganizations studied.[70] But the unsecured creditors' stake in today's reorganization is hardly negligible.[71] When they deliver control rights to secured creditors or DIP lenders, the contracts Baird and Rasmussen describe are delivering control rights not to sole residual owners, but to institutionally powerful classes that may not even be the firms' principal risk bearers.[72]

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moment Chapter 11 is filed, a revolving credit facility is already in place that entrusts decisionmaking authority to a single entity. This entity will often step in and replace management. It will make the necessary operational decisions before Chapter 11 begins.").

Baird and Rasmussen portray these creditors as simply having control. Professor Stephen Lubben provides a more nuanced theory that portrays them as sharing control with other participants in the case. Stephen J. Lubben, Learning the Wrong Lessons: Baird and Rasmussen's Third Lesson of Enron and the Inherent Ambiguity of Control (2003) (unpublished manuscript on file with author).

67. In over half of the cases, a class of unsecured creditors recovered 100 cents on the dollar. In all cases, a class of unsecured creditors recovered more than 18 cents on the dollar. The debtor-in-possession lender would have priority over all these classes.

68. David A. Skeel, Jr., *Creditors' Ball: The "New" New Corporate Governance in Chapter* 11, 152 U. PA. L. REV. 917, 936 (2003) (questioning whether DIP financers "have appropriate decision making incentives during the Chapter 11 case").

69. In 41 of the 78 cases (53%), unsecured creditors were paid in full.

70. A preliminary survey of reorganization plans from the period 2001–02 indicates that unsecured creditors recover 10% or less in about 29% of cases, 11% to 49% in about 33% of cases, 50% to 99% in about 13% of cases, and 100% in about 25% of cases. The corresponding percentages for the cases studied are zero, 27%, 15%, and 59%. *See* Appendices B and C *infra* at 1373–74. Lynn M. LoPucki, Preliminary Survey (spreadsheet on file with author) (2003).

71. *Id.*

72. For example, the preliminary survey mentioned in the previous note discovered no case in which a DIP lender recovered less than the full amount owing.

The classes gaining control rights under those contracts are biased in favor of liquidation. Perhaps the increase in the number of liquidations since 1998 is to some degree attributable to that bias.[73] The legislative history of the Bankruptcy Code explicitly and correctly rejected the idea that protection of the public investors in stocks and bonds should be left "to a plan negotiated by a debtor in distress and senior institutional creditors who will have their own interests to look after."[74]

Finally, some scholars who realize that no single, identifiable residual owner exists nevertheless believe the residual owner concept can be useful in identifying and excluding non-residual owner classes from governance.[75] Those scholars may take hope from the fact that many non-residual owners can be identified in the data.[76]

Whitford and I argued that the bankruptcy system should identify those who clearly and obviously are not residual owners and deny them estate-funded representation.[77] That falls far short, however, of specifying a useful mechanism by which the remaining investors could govern. No means have yet been suggested to unite the interests of co-residual owners and align them sufficiently with those of firm to provide effective governance.[78]

III. A BRIEF RESPONSE TO PROFESSOR RASMUSSEN

In his comment on this article, Professor Robert K. Rasmussen points out that my data do not prove that the current system of bankruptcy governance maximizes the value of bankrupt enterprises.[79] In that, he is correct. My methodology had a more modest goal. As Rasmussen aptly

73. Lynn M. LoPucki, The Bankruptcy Boom (unpublished manuscript 2003) (graph showing a large increase in bankruptcy liquidation of large, public companies since 1998).

74. H.R. REP. NO. 95-598, at 10 (1977).

75. *E.g.*, Frost, *supra* note 12, at 115.

76. Of course, the number who can be identified in this end-of-the-case data is probably considerably larger than could be identified sufficiently early in the case to yield governance benefits.

77. Lynn M. LoPucki & William C. Whitford, *Preemptive Cram Down*, 65 AM. BANKR. L.J. 625 (1991) (arguing for "'preemptive cram down' orders extinguishing the interest of the shareholders of clearly insolvent debtors").

78. Skeel's proposal that all co-residual owners vote as a single class, *supra* note 2–6, does not work. To illustrate the problem, assume two investor priority levels, senior and junior. The senior would tend to favor liquidation, the junior would tend to favor reorganization. If every investor voted its self-interest, the outcome of the vote would depend not on the desirability of liquidation or reorganization, but merely on which priority level had the larger amount of claims.

79. Robert K Rasmussen, *The Search for Hercules: Residual Owners, Directors and Corporate Governance in Chapter 11*, 82 WASH. U. L.Q. 1445, 1468 (2004) ("What he has failed to do, however, is to demonstrate that those who make decisions today do so in a way that does not maximize the value of the enterprise.").

put it, that goal was "to shake the faith of those who believe that the fate of financially distressed firms is best determined by those with their money on the line."[80] Those with their money on the line are the residual owners. I assumed that proving it impossible to identify them and put them in control would doom the idea of direct investor governance during bankruptcy. The system of fiduciary control contemplated by the 1978 Bankruptcy Code would be the only viable alternative.

Professor Rasmussen has, however, come up with a third possibility. The courts could honor contracts by which debtors have ceded "control" to particular creditors. Rasmussen seems to acknowledge that the controllers thus selected would be neither single residual owners, nor coalitions of residual owners. The controllers' interests might conflict with those of other creditors and of the firm. But those conflicts, Rasmussen posits, may not have any appreciable effect on investment policy. Stakeholders who compete for control, he argues, do not "fight over how to increase the size of the pie"[81] they fight only over the sizes of their respective pieces. When it comes to the selection of investment policies, the stakeholders' common interest maximizing the total value of the emerging firm so far outweighs their conflicting interests in maximizing their individual shares that the latter can safely be ignored. To maximize firm value, all that is needed is that "those who have a voice in making [the] decision[s] have both the skill and [some] incentive to make [them] correctly."[82]

In context, Rasmussen's claim is essentially that the other creditors can trust the DIP lender to act in the interests of all when making the decision to call the loan and liquidate the business. Professor Jay Lawrence Westbrook recently argued convincingly to the contrary

> "[N]eutrality is a necessary concept in any system for managing a general default in which the policy maker provides for multiple beneficiaries and charges the manager with maximizing value for all of them. A dominant secured party cannot be a neutral manager, and its management creates a serious potential of loss for other beneficiaries. It is just that result that provided the impetus for a major restructuring of the insolvency system in Britain.[83]

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80. *Id.* at 1446.
81. *Id.* at 1448 ("What they do not do, however, is fight over how to increase the size of the pie.").
82. Douglas G. Baird & Robert K. Rasmussen, *Chapter 11 at Twilight*, 56 STAN. L. REV. 673, 696 (2003).
83. Jay Lawrence Westbrook, *The Control of Wealth in Bankruptcy*, 82 TEX. L. REV. 795, 852 (2004).

In the absence of empirical evidence, I am inclined to agree with Westbrook. (It is no small irony that the two of us, who have been economic skeptics, should find ourselves arguing that economic incentives matter, and that the leading law and economics scholars—Baird and Rasmussen—should be on the other side, insisting that conflicting economic incentives can safely be ignored.)

Rasmussen may be correct in his assertion that investors at different priority levels seldom actually clash over the firm's investment policy. But that does not mean that, given the chance, investors at different priority levels would make the same decisions. Clashes over investment policy did occur in the 1980s. Creditors routinely forced the resignations of managers and replaced them with others who governed more to the creditors' liking.[84] In the 1990s, the bankruptcy courts began competing for the favor of managers who could bring them big cases.[85] As a result, creditors are less able to force failed managers from office and so less able to contest the direction that management (and in some cases the DIP lender) set for the company.[86] The failure of various creditor groups to maintain corporate governments-in-exile that clash with managers over investment policy does not mean, however, that given control, those groups would make the same investments. They have different incentives, and will pursue them up to the point where the courts call a halt to it. Thus, I see no reason to believe that governance by contractual designee will mean neutral governance. I look forward to the coming debate over Baird and Rasmussen's theory of "control rights."

I hope that the debate over the empowerment of the residual owner is now at an end. From Rasmussen's Comment, that is not entirely clear. Early in that Comment, he identifies two uses of the

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84. Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 696, 723–37 (1993) (empirical study finding high rates of CEO turnover); *id.* at 746–48 (empirical study concluding that creditors dominated many debtor managements).

85. LYNN M. LOPUCKI, COURTING FAILURE: HOW COMPETITION FOR BIG CASES IS CORRUPTING THE BANKRUPTCY COURTS 16–18 (2005) (explaining the corrupting power of the competition).

86. *Id.* at 143–45 (explaining the inability of competing courts to force changes of management).

residual owner concept. The first is as a "yardstick,"[87] or "metric"[88] by which to evaluate corporate governance. Rasmussen concludes that the "sole owner" better serves that purpose,[89] suggesting that we will hear no more of residual owner as a yardstick.

The second use of the residual owner concept he describes as "more direct. It would attempt by law to vest control rights directly in the residual claimants. It is this use of the residual owner standard that is LoPucki's focus here."[90] Rasmussen never directly tells us what he thinks of this second use. His failure to endorse it in these circumstances, however, suggests that at long last Freddy is really, finally, dead.

IV. CONCLUSIONS

Many scholars are committed to the idea that market actors with their own money at stake—residual owners—can better decide the fate of reorganizing firms than bankruptcy judges. That commitment led to a sixteen-year effort to discover a way of identifying and empowering the single residual owner of the reorganizing firm. It is time to recognize that the effort has failed. This study has shown that most reorganizing companies have no single residual owner and suggests that companies with single residual owners are rare. Neither courts nor contracts can put the single residual owner in control of the reorganizing firm because the single residual owner does not exist.

The effort to identify and empower residual owners is not merely futile, it is dangerous. Some scholars have argued that secured and DIP lenders are the residual owners of reorganizing firms and applauded those lenders' efforts to take control.[91] Those scholars have been influential. In many

87. Rasmussen, *supra* note 79, at 1453 ("The [residual owner] insight could be deployed two ways. One is as a yardstick. We ascertain which groups or groups is in control of the process and then compare their incentives to that of a residual owner . . . .").

88. *Id.* at 1459 ("The residual owner concept . . . is a metric by which to assess the structure of governance rights in corporations.").

89. Rasmussen, *supra* note 79, at 1453 ("or, in an even better metric, that of a sole owner"). Presumably, the "sole owner" is a better metric because it is simpler and easier to understand. By that standard, the traditional legal standard, the "interests of the estate," would be better yet.

90. *Id.*

91. *E.g.*, Baird & Rasmussen, *supra* note 19, at 785 (applauding the supposed shift in power from bankruptcy judges to secured lenders); Baird & Rasmussen, *supra* note 6, at 695 (arguing that "[p]roviders of new cash . . . at first approximation, have exactly the right incentive"). In fact, providers of new cash to bankrupt businesses ordinarily have incentives that cause them to favor investment policies far more conservative than the policies that would maximize the value of the firm.

cases, senior lenders who are not at risk have succeeded in gaining control. As a result, the system may be liquidating firms that it should reorganize.

Pseudo-residual owners have interests that differ from those of the firm. Even if the differences are small, they may be capable of deflecting firm investment policy. In 1993, Whitford and I discovered that even subtle shifts in investment policy—management's pursuit of potentially small gains in firm value—could result in much larger shifts of risk among investors.[92] Thus, small deviations of the controlling owner's interests from the firm's interests can create huge conflicts among the parties in interest. This study has shown that in a system that attempted to identify and empower the residual owner, such conflicts would be ubiquitous.

The scholars who have been leading the effort to identify and empower the single residual owner misunderstand the existing system. They assume that judges make the reorganization-liquidation decision under current procedure.[93] Judges do not. Managers remain in control of reorganizing firms. The reorganization-liquidation decision is committed to the managers' business judgment and so is virtually beyond judicial review.[94]

DIP lenders have high priority, are usually fully secured, and bear very little risk.

92. LoPucki & Whitford, *supra* note 12, at 788–96. Whitford and I proposed a system for ameliorating those conflicts. The system would have required debtors to compensate classes whose expectancies are disproportionately risked in pursuit of the interests of the firm as a whole. *Id.* (proposing risk compensation payments); Lynn M. LoPucki & William C. Whitford, *Compensating Unsecured Creditors for Extraordinary Bankruptcy Reorganization Risks*, 72 WASH. U. L.Q. 1133 (1994) (elaborating on risk compensation proposal). Those "risk compensation payments" would give unsecured creditors protection analogous to that provided secured creditors by "adequate protection payments." *Id.* at 1146–47 (analogizing risk compensation payments for unsecured creditors to adequate protection payments for secured creditors).

93. *Supra* note 19 and accompanying text.

94. One court described the test applicable to the prepetition sale of all or part of the firm as follows:

> This Court follows the "sound business purpose" test when examining § 363(b) sales . . . . The test consists of four elements. A trustee or debtor-in-possession must prove that: (1) a sound business reason or emergency justifies a pre-confirmation sale; (2) adequate and reasonable notice of the sale was provided to interested parties; (3) the sale has been proposed in good faith: and (4) the purchase price is fair and reasonable. The first requirement is a sound business reason justifying the pre-confirmation sales. This element is similar to many states "business judgment rule" where great deference is given to a business in determining its own best interests.

In re W.A. Mallory Co., Inc., 214 B.R. 834, 836 (Bankr. E.D. Va. 1997).

If the sale is proposed as part of a plan of reorganization, the judge is supposed to review it. Lynn M. LoPucki, *Can the Market Evaluate Legal Regimes?*, 54 VAND. L. REV. 331, 346–47 (2001) (explaining the feasibility requirement). But many courts simply defer to the decision of the parties, and those courts that do review do not make the business decision but merely decide whether the plan proponent's decision is feasible.

The managers of reorganizing firms do not have their own money at risk, but neither do the managers of public companies generally.[95]

The current form of bankruptcy governance is not perfect, but it is fundamentally sound. That form recognizes that the prepetition contracts among investors were not intended to govern the firm in bankruptcy, but merely to deliver the firm to the bankruptcy court. The court will safeguard the firm during the brief time necessary for the investors to recontract. In the interim, the bankruptcy system provides the only form of governance practical in the circumstances: a benevolent dictatorship of the board as fiduciary and the bankruptcy judge as referee. The involvement of judges in bankruptcy governance is not the problem, but the solution. The empirical evidence suggests that the reorganization process works best in districts where the bankruptcy judges are active participants, and fails dismally in those that allow the market actors free rein.[96]

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95. The decision to reorganize or liquidate—which judges rarely make or review—should be distinguished from the decision whether a particular plan of reorganization or liquidation will work—a decision the board makes and that judges are required to review. 11 U.S.C. § 1129(a)(11) (2000).

96. Lynn M. LoPucki & Sara D. Kalin, *The Failure of Public Company Bankruptcies in Delaware and New York: Empirical Evidence of a "Race to the Bottom*," 54 VAND. L. REV. 231 (2001) (showing failure rates for Delaware- and New York-reorganized firms that are five to seven times the corresponding rates for other courts); Lynn M. LoPucki & Joseph W. Doherty, *Why Are Delaware and New York Bankruptcy Reorganizations Failing?*, 55 VAND. L. REV. 1933 (2002) (showing failure rates for Delaware-reorganized firms that are more than ten times the corresponding rates for courts other than Delaware and New York).

Appendix A. Investor Priority Levels in Reorganizing Firms

(1) Firm name	(2) Number of investor priority levels	(3) Senior unsecured	(4) Unsecured	(5) Senior-subordinated	(6) Junior subordinated	(7) Preferred stock	(8) Common stock
LTV Corporation	13	3	5	3		1	1
Days Inn of America	8	1	1	1	4		1
Lomas Financial (1989)	8	1	1	2		3	1
National Gypsum Corp.	7	1	2	1	1		2
Charter Medical	7		1	1	2	2	1
Tracor	7		1	2	3		1
Cherokee, Inc.	6	1	1	1	1	1	1
Envirodyne Industries	6	1	2	1	1		1
Kash N Karry	6	1	1	1		2	1
Memorex (1992)	6	1	1	1	1	1	1
Interco, Inc.	6		1	1	2	1	1
Fairfield Communities	6		2	2	1		
Hills Department Stores	6		1	2	1	1	1
JPS Textile Group	6		1	1	1	2	1
New Valley Corp.	6		1	1	1	2	1
Orion Pictures	6		1	2	1	1	1
Continental Airlines (1990)	6		4	1			1
Doskocil Companies	6		3	2			1
Intermark, Inc.	6		2	2		1	1
Federated Department Stores	5	1	1	1	1		1
Great American Communications	5	1	1	1	1		1
Memorex (1994)	5	1	1	1	1		1
TWA (1993)	5	1	1	1		1	1
Anacomp	5		1	1	1	1	1
Best Products	5		1	1	1	1	1
National Convenience Stores	5		1	1	1	1	1
NVR	5		1	1	1	1	1
Restaurant Enterprises	5		1	1	1	1	1
Southland Corporation	5		1	1	1	1	1
SPI Holding	5		1	1	1	1	1
UDC Homes	5		1	1	1	1	1
Jamesway Corporation	4	1	1	1			1

(1) Firm name	(2) Number of investor priority levels	(3) Senior unsecured	(4) Unsecured	(5) Senior-subordinated	(6) Junior subordinated	(7) Preferred stock	(8) Common stock
O'Brien Environmental Energy	4	1	1	1			1
US Home Corp.	4	1	1	1			1
Zale Corp.	4	1	1		1		1
Rexene Corporation	4	1	1	1			1
Calton, Inc.	4		1	1	1		1
Forum Group	4		1	1	1		1
General Development Corp.	4		1	1	1		1
Insilco	4		1	1	1		1
Revco	4		1	1	1		1
Spreckels Industries	4		1	1	1		1
USG Corporation	4		1	1	1		1
AM International	4		1	1		1	1
Americold	4		1	1		1	1
Ames Department Stores	4		1	1		1	1
Edisto Resources	4		1	1		1	1
First City Bancorporation of Texas	4		1	1		1	1
Resorts International	4		2	1			1
West Point Acquisitions	4		1	1		1	1
Bibb Company	3		1	1			1
Circle K Corporation	3		1	1			1
Continental Information Systems	3		1	1			1
Gaylord Container	3		1	1			1
Gilbert/Robinson	3		1	1			1
Grand Union Company	3		1	1			1
Hadson	3		1	1			1
Harvard Industries	3		1	1			1
Hexcel	3		1	1			1
Hillsborough Holdings	3		1	1			1
Ithaca Industries	3		1	1			1
JWP, Inc.	3		1	1			1
Mayflower Group	3		1	1			1
Petrolane Gas	3		1	1			1
Salant Corporation	3		1	1			1

(1) Firm name	**(2) Number of investor priority levels**	**(3) Senior unsecured**	**(4) Unsecured**	**(5) Senior-subordinated**	**(6) Junior subordinated**	**(7) Preferred stock**	**(8) Common stock**
Wang Laboratories	3		1	1			1
WTD Industries	3		1	1			1
Greyhound Lines, Inc.	3		1	1			1
America West	3		1			1	1
El Paso Electric	3		1			1	1
Lone Star Industries	3		1			1	1
Standard Brands Paint	3		1			1	1
Sudbury	3		1			1	1
Westmoreland Coal	3		1			1	1
Eagle Pitcher	3		2				1
Lomas Financial (1995)	3		2				1
NACO Finance	3	1	1				1
Alexander's Inc.	2		1				1
Carter Hawley Hale	2		1				1
Emerson Radio	2		1				1
International American Homes	2		1				1
Kinder Care Learning Centers	2		1				1
Rose's Stores	2		1				1
TGX Corporation	2		1				1
Average / Total	4.3	18	84	66	33	33	84
Total as a percentage of all cases		21%	100%	79%	39%	39%	100%

Appendix B. Single Residual Owner Firms

(1) Firm name	(2) Senior unsecured	(3) Unsecured	(4) Senior subordinated	(5) Junior subordinated	(6) Preferred stock	(7) Common stock	(8) Residual owner
Alexander's, Inc.		100 cents				**unimpaired**	Common
Americold		100 cents	100 cents		unimpaired	**unimpaired**	Common
Edisto Resources		100 cents	90 cents		unimpaired	**$13 million**	Common
Hexcel		100 cents	100 cents			**unimpaired**	Common
Hillsborough Holdings		100 cents	100 cents			**dilution**	Common
Kinder Care Learning		100 cents				**14% of the common**	Common
O'Brien Environmental Energy	100 cents	100 cents	100 cents			**51% of the common**	Common
TGX Corporation		100 cents				**unimpaired**	Common
Westmoreland Coal		100 cents			unimpaired	**unimpaired**	Common
New Valley Corp.		100 cents	100 cents	100 cents	**as ordered**	nominal	Preferred
Calton, Inc.		100 cents	100 cents	**89** cents		$4 million	Junior sub
AM International		100 cents	**16-68 cents**		nominal	nominal	Senior sub
Bibb Company		100 cents	**46 cents**			$4 million	Senior sub
Grand Union Co (1995)		100 cents	**63 cents**			$1 million	Senior sub
Harvard Industries		100 cents	**60 cents**			$4 million	Senior sub
Interco, Inc.		100 cents	**14+ cents**	5 cents+	0	0	Senior sub
Kash N Karry	100 cents	100 cents	**48 cents**		0	0	Senior sub
Mayflower Group		100 cents	**69 cents**			$6 million	Senior sub
Petrolane Gas		100 cents	**35+ cents**			nominal	Senior sub
Revco		100 cents	**68 cents**	4 cents		0	Senior sub
Rexene Corporation	100 cents	100 cents	**67 cents**			8% of the common	Senior sub
America West		**complex**			nominal+	0	Unsecureds
Ames Department Stores		**13-77 cents**	2 cents		0	0	Unsecureds
Best Products (1991)		**47 cents**	0	0	0	0	Unsecureds
Carter Hawley Hale		**46 cents**				nominal	Unsecureds
Circle K Corporation		**unknown**	0			0	Unsecureds
Emerson Radio		**18+ cents**				0	Unsecureds
Greyhound Lines, Inc.		**37 cents**		0		0	Unsecureds
JWP, Inc.		**34-58 cents**	nominal			nominal	Unsecureds
Sudbury		**85 cents**			$2 million	nominal	Unsecureds

\+ Indicates that class received additional property for which a value could not be assigned, usually warrants
Separation of numbers by hyphen indicates a range of possible recoveries
Separation by forward slash indicates different recoveries for classes at same priority level.
Shading indicates residual owners classes.
"Cents" are cents per dollar of claim paid to creditors in class.

Appendix C. Multiple Residual Owner Firms

(1) Firm name	(2) Senior unsecured	(3) Unsecured	(4) Senior subordinate	(5) Junior subordinate	(6) Preferred stock	(7) Common stock	(8) Number of residual owners
Days Inn of America	50 cents	23 cents	9 cents	6 cents		0	2
TWA (1993)	32 cents	20 cents	3 cents		0	0	2
Zale Corp.	25 cents	18 cents		7 cents		0	2
Eagle Pitcher		27 cents				0	2[1]
El Paso Electric		65/80 cents			12% of the common +	3% of the common +	2
General Development		23 cents	10 cents	2 cents		0	2
Insilco		35/50 cents	19 cents	10 cents		$2 million	2
Wang Laboratories		63+ cents	63+/2 cents			unknown	2*
Anacomp		100 cents	87 cents	16 cents	nominal	nominal	2
Cherokee, Inc.	100 cents	100 cents	63 cents	41 cents	$1 million	8% of the common	2
Gilbert/Robinson		100 cents	100 cents			6% of the common	2
Great American Communications	100 cents	100 cents	84 cents	75 cents		2% of the common	2
Hadson		100 cents	69 cents			$111 million	2
JPS Textile Group		100 cents	58 cents	13 cents	nominal	0	2
Memorex (1992)	91+ cents	100 cents	37 cents	18 cents	$5 million+	nominal	2
Memorex (1994)	16 cents	100 cents	63 cents	13 cents		nominal	2

(1) Firm name	(2) Senior unsecured	(3) Unsecured	(4) Senior subordinate	(5) Junior subordinate	(6) Preferred stock	(7) Common stock	(8) Number of residual owners
Orion Pictures		100 cents	32/81 cents	10 cents	nominal	nominal	2
Resorts International		100 cents	70 cents			$18 million	2*
UDC Homes		100 cents	83 cents	21 cents	0	0	2
US Home Corp.	100 cents	100 cents	85 cents			$41 million	2
USG Corporation		100 cents	51 cents	12 cents		nominal	2
West Point Acquisition		100 cents	32 cents		$20 million	nominal	2
WTD Industries		100 cents	100 cents			$3 million	2
Restaurant Enterprises		100 cents	94 cents	65 cents	$28 million	$234,000	2
Spreckels Industries		100 cents	100 cents	67 cents		25% of the common	2
Lone Star Industries		100 cents			84-90% of "face value"	35% of the common	2
Bucyrus-Erie Company		by entity					2*
Lomas Financial (1995)		10-15/66 cents				0	2*
Federated Dept. Stores	89 cents	46 cents	15 cents	7 cents		0	3
Jamesway Corp. (1993)	61 cents	53 cents	27 cents			nominal	3
Intermark, Inc.		79 cents	36 cents		nominal	nominal	3*
National Convenience Stores		75 cents	37-42 cents	11 cents	nominal	nominal	3
National Gypsum Corp.	86 cents	35 cents	86 cents	27 cents		0	3*
NVR, Inc.		100/45 cents	59 cents	20 cents	$2 million	$9 million	3
Salant Corporation		62 cents	87/62 cents			22-44% of the common	3
Standard Brands Paint		58 cents			25% of the common	25% of the common	3
Charter Medical		100 cents	70 cents	38 cents	$7 million	3% of the common	3
Hills Department Stores		105 cents	78 cents	30 cents	stock	nominal	3*
Southland Corporation		100 cents	66/71/61 cents	54/27 cents	5% of the common	7% of the common	3
Lomas Financial (1989)	83 cents	53 cents	36/21 cents		nominal	nominal	3
Envirodyne Industries	100 cents	65 cents	50 cents	18 cents		0	4*
Fairfield Communities		42 cents	42 cents	42 cents		0	4*
Tracor		100 cents	37/9 cents	1 cents		diluted	4*
Continental Airlines		unknown	0			0	4*
Continental Information Systems		59 cents	12 cents			0	5*
Doskocil Companies		37 cents	18 cents			$3 million	5*
LTV Corporation	26-31 cents[2]	13-57 cents[2]	8-11 cents[2]		$500,000	$4 million	9*
Amdura		by entity					Several*

* Figure includes one or more residual owners resulting from additional entities in corporate group
+ Indicates that class received additional property for which a value could not be assigned, usually warrants
Separation of numbers by hyphen indicates a range of possible recoveries
Separation by forward slash indicates different recoveries for classes at same priority level.
Shading indicates residual owners classes.
"Cents" are cents per dollar of claim paid to creditors in class.
1 Eagle Pitcher commercial creditors and asbestos personal injury claimants were considered separate priority levels because of the conflict of interest between present and future creditors
2 LTV ranges of recovery are for multiple classes. Low number stated is for lowest end of any range; highest number stated is for highest end of any range.